Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims, including those in the First Preliminary Amendment, in the application:

Listing of Claims:

Claim 1 (currently amended): A nanocrystal oxide-glass mesoporous composite powder or thin film having a three-dimensional structure with regularly arranged mesopores and in which a glass phase contains P_2O_5.

Claim 2 (currently amended): A nanocrystal oxide-glass mesoporous composite powder or thin film having a hexagonal or cubic three-dimensional structure and in which a glass phase contains P_2O_5.

Claims 3-4 (canceled).

Claim 5 (currently amended): A manufacturing method of nanocrystal oxide-glass mesoporous composite powder ~~or thin film~~, comprising the steps of:

using a block macromolecule or interface activating agent as a template, and adding hydrochloric acid (HCl) to ~~a~~ an aqueous solution of metal alkoxide, ~~or~~ metal chloride, or ~~an aqueous solution of~~ $PO(OC_2H_5)_3$ ~~or $Si(OC_2H_5)_4$(TEOS)~~ or a solution obtained by dissolving these in alcohol such as ethanol;

manufacturing powder having a glass phase metal oxide-inorganic oxide composite mesostructure with a sol-gel process;

maturing and gelling this between room temperature and 90°C;

removing the block macromolecule or interface activating agent by performing heat treatment thereto in the atmosphere at 350 to 400°C and manufacturing a glass phase metal oxide-glass phase mesoporous composite powder; and

additionally performing heat treatment thereto at 400 to 700°C so as to change the phase of the glass phase metal oxide into crystallite.

Claim 6 (currently amended): A manufacturing method of nanocrystal oxide-glass mesoporous composite thin film, comprising the steps of:

using a block macromolecule or interface activating agent as a template, adding hydrochloric acid (HCl) to ~~a~~ metal alkoxide, ~~or~~ metal chloride, or an aqueous solution of $PO(OC_2H_5)_3$ ~~or $Si(OC_2H_5)_4$(TEOS)~~ or a solution obtained by dissolving these in alcohol such as ethanol, and obtaining a sol solution by performing hydrolysis while adjusting the pH;

forming a thin film having a glass phase metal oxide-inorganic oxide-block macromolecule ~~(~~ or interface activating agent ~~)~~ composite mesostructure on a substrate by delivering the sol solution in drops onto a substrate, rapidly rotating the substrate, and evaporating and gelling the solvent;

maturing and gelling this between room temperature and 90°C;

removing the block macromolecule or interface activating agent by performing heat treatment thereto in the atmosphere at 350 to 400°C and manufacturing a glass phase metal oxide-glass phase mesoporous composite thin film; and

additionally performing heat treatment thereto at 400 to 700°C so as to change the phase of the glass phase metal oxide into crystallite.

Claims 7-10 (canceled).

Claim 11 (original): A secondary battery configured with a nanocrystal oxide-glass mesoporous composite electrode having a three-dimensional structure with regularly arranged mesopores.

Claim 12 (original): The secondary battery according to claim 11, wherein the average diameter of pores is 2nm to 10nm.

Claims 13-25 (canceled).

Claim 26 (new): A secondary battery according to claim 11, wherein a framework of the nanocrystal oxide-glass mesoporous composite electrode has a hexagonal or cubic structure and contains uniform crystallite oxides of several nano-orders.

Claim 27 (new): A secondary battery according to claim 26, wherein a thickness of a wall of the framework is 2 to 9nm.

Claim 28 (new): A secondary battery according to claim 11, wherein the nanocrystal oxide is one or more types of metal oxides selected from a group consisting of TiO_2, NiO, MnO_2, FeO, Fe_2O_3, Fe_3O_4, CoO, CoO_2, CrO_2, Co_3O_4, WO_3, SnO and SnO_2.

Claim 29 (new): A secondary battery according to claim 11, wherein the glass phase is one or more types of inorganic oxides selected from a group consisting of P_2O_5, SiO_2 and B_2O_3.

Claim 30 (new): A secondary battery according to claim 11, wherein the glass phase is a multicomponent glass phase containing one or more types of dissimilar metal oxides selected from a group consisting of MnO_2, NiO, Fe_2O_3, CuO, Li_2O, WO_3 and SnO_2 at a molar ratio of 2% to 60% in relation to the glass phase.

Claim 31 (new): A secondary battery according to claim 11, wherein both an ionic conductive path and electronic conductive path are provided in a framework of the nanocrystal oxide-glass mesoporous composite electrode by adding ion conductive or electron conductive dissimilar metal oxides in a network-shaped glass phase at a molar ratio of 2% to 60% in relation to the glass phase.

Claim 32 (new): A secondary battery according to claim 11, wherein the nanocrystal oxide-glass mesoporous composite is used as the electrode of the secondary battery, and its energy density of charging or discharging is able to maintain a rate of more than 60% of 0.1 A/g even when increasing the charging or discharging rate to ten times 0.1 A/g (1.0 A/g), and even one hundred times 0.1 A/g (10 A/g).

Claim 33 (new): A secondary battery according to claim 11, wherein the nanocrystal oxide-glass mesoporous composite is used as the electrode of the secondary battery so as to increase the surface area, and the charging/discharging capacity has a large capacity of 1.0 to 5.0 times the maximum theoretical capacity in relation to active oxides.

Claim 34 (new): A secondary battery according to claim 11, wherein the nanocrystal oxide-glass mesoporous composite is used as the electrode of the secondary battery, and a high reversible ratio of 95% or higher is realized even when increasing the charging or discharging rate to ten times 0.1 A/g (1.0 A/g), and even one hundred times 0.1 A/g (10 A/g).

Claim 35 (new): A secondary battery according to claim 11, wherein the nanocrystal oxide-glass mesoporous composite is used as the electrode of lithium, and a high reversible capacity of 60% to 70% or higher of the initial capacity is realized after a charging/discharging cycle of several hundred cycles even when increasing the charging or discharging rate to ten times 0.1 A/g (1.0 A/g), and even one hundred times 0.1 A/g (10 A/g).

Claim 36 (new): A secondary battery according to claim 11, wherein a nanocrystal oxide-a glass phase of inorganic oxide-dissimilar metal oxide to which a slight amount of dissimilar metal oxide was added has a high reversible capacity at a rate of 40% to 70% or higher of 0.1 A/g even when the charging/discharging rate is increased to a rate of one hundred times, five hundred times or one thousand times 0.1 A/g.

Claim 37 (new): A secondary battery according to claim 11, wherein the battery has a high reversible ratio, $r > 95\%$.

Claim 38 (new): A nanocrystal oxide-glass mesoporous composite powder or thin film according to claim 1, wherein a porous structure framework contains uniform nanocrystal oxides.

Claim 39 (new): A nanocrystal oxide-glass mesoporous composite powder or thin film according to claim 1, wherein the powder or thin film has a large specific surface area in a range of 50 to $400 m^2/g$.

Claim 40 (new): A nanocrystal oxide-glass mesoporous composite powder or thin film according to claim 2, wherein a porous structure framework contains uniform nanocrystal oxides.

Claim 41 (new): A nanocrystal oxide-glass mesoporous composite powder or thin film according to claim 2, wherein the powder or thin film has a large specific surface area in a range of 50 to $400 m^2/g$.

Claim 42 (new): A method according to claim 5, wherein an inorganic oxide of a stable glass phase is P_2O_5.

Claim 43 (new): A method according to claim 5, wherein a dissimilar metal oxide selected from a group consisting of MnO_2, NiO, Fe_2O_3, CuO, Li_2O, WO_3 and SnO_2 is added in a slight amount at a synthesizing stage, and the mesoporous powder is formed from a nanocrystal oxide, a glass phase of inorganic oxide, and said dissimilar metal oxide having a multicomponent glass phase.

Claim 44 (new): A method according to claim 5, wherein metal alkoxide or metal chloride is $Ti(OC_3H_7)_4$, $Zr(OC_4H_9)_4$, $NbCl_5$, LiCl, $NiCl_2$, $FeCl_3$, $CuCl_2$, $MnCl_2$, $SnCl_4$ or WCl_5.

Claim 45 (new): A method according to claim 5, wherein said powder is used in the manufacture of a lithium battery, lithium intercalation electric device, photocatalytic device, solar battery, or energy storage device.

Claim 46 (new): A method according to claim 6, wherein an inorganic oxide of a stable glass phase is P_2O_5.

Claim 47 (new): A method according to claim 6, wherein a dissimilar metal oxide selected from a group consisting of MnO_2, NiO, Fe_2O_3, CuO, Li_2O, WO_3 and SnO_2 is added in a slight amount at a synthesizing stage, and the mesoporous thin film is formed from a nanocrystal oxide, a glass phase of inorganic oxide, and said dissimilar metal oxide having a multicomponent glass phase.

Claim 48 (new): A method according to claim 6, wherein metal alkoxide or metal chloride is $Ti(OC_3H_7)_4$, $Zr(OC_4H_9)_4$, $NbCl_5$, $LiCl$, $NiCl_2$, $FeCl_3$, $CuCl_2$, $MnCl_2$, $SnCl_4$ or WCl_5.

Claim 49 (new): A method according to claim 6, wherein said thin film is used in the manufacture of a lithium battery, lithium intercalation electric device, photocatalytic device, solar battery, or energy storage device.